

Part 1: Linux Command Line Basics

Using a Linux terminal (VM, WSL, or cloud instance):

- Create the following directory structure:

```
~/devops-lab/
├── projects/
│   ├── app1/
│   └── app2/
└── configs/
    └── logs/
```

- Navigate to `~/devops-lab/projects/app1/` and create a file called `README.md`
- Copy `README.md` to `app2/` directory
- List all files in `~/devops-lab/` recursively showing hidden files

Deliverable:

Screenshot of your terminal showing the commands and their output

Solution:

1. Create the following directory structure

```
[pujan@ip-10-10-1-92 devops-lab]$ tree /home/pujan/devops-lab/
/home/pujan/devops-lab/
└── projects
    ├── app1
    └── app2
3 directories, 2 files
```

2. Navigate to `~/devops-lab/projects/app1/` and create a file `README.md`

```
[pujan@ip-10-10-1-92 devops-lab]$ tree /home/pujan/devops-lab/
/home/pujan/devops-lab/
└── projects
    └── app1
        └── README.md
3 directories, 3 files
```

3. Copy `README.md` to `app2/` directory

```
[pujan@ip-10-10-1-92 devops-lab]$ touch projects/app1/README.md
[pujan@ip-10-10-1-92 devops-lab]$ mv /home/pujan/devops-lab/projects/app1/README.md /home/pujan/devops-lab/projects/app2/
```

```
[pujan@ip-10-10-1-92 devops-lab]$ tree /home/pujan/devops-lab/
/home/pujan/devops-lab/
├── configs
└── logs
└── projects
    ├── app1
    └── app2
        └── README.md

3 directories, 3 files
```

4. List all files in ~/devops-lab/ recursively showing hidden files:

```
[pujan@ip-10-10-1-92 devops-lab]$ ls -ltaR /home/pujan/devops-lab/
/home/pujan/devops-lab/:
total 4
drwxr-xr-x. 4 pujan pujan 30 Nov 18 09:48 projects
drwxr-xr-x. 3 pujan pujan 49 Nov 18 09:45 .
-rw-r--r--. 1 pujan pujan 0 Nov 18 09:45 configs
-rw-r--r--. 1 pujan pujan 0 Nov 18 09:45 logs
drwx-----. 16 pujan pujan 4096 Nov 18 09:43 ..

/home/pujan/devops-lab/projects:
total 0
drwxr-xr-x. 2 pujan pujan 6 Nov 18 09:50 app1
drwxr-xr-x. 2 pujan pujan 23 Nov 18 09:50 app2
drwxr-xr-x. 4 pujan pujan 30 Nov 18 09:48 .
drwxr-xr-x. 3 pujan pujan 49 Nov 18 09:45 ..

/home/pujan/devops-lab/projects/app1:
total 0
drwxr-xr-x. 2 pujan pujan 6 Nov 18 09:50 .
drwxr-xr-x. 4 pujan pujan 30 Nov 18 09:48 ..

/home/pujan/devops-lab/projects/app2:
total 0
drwxr-xr-x. 2 pujan pujan 23 Nov 18 09:50 .
-rw-r--r--. 1 pujan pujan 0 Nov 18 09:49 README.md
drwxr-xr-x. 4 pujan pujan 30 Nov 18 09:48 ..
```